



# Blast 2 Sequences results

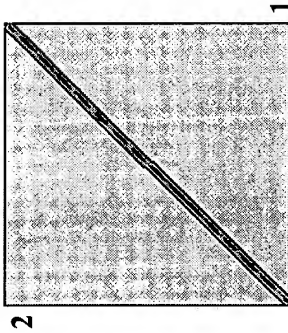
PubMed Entrez BLAST OMIM Taxonomy Structure

BLAST 2 SEQUENCES RESULTS VERSION BLASTN 2.2.10 [Oct-19-2004]

Match:  Mismatch:  gap open:  gap extension:   
x\_dropoff:  expect:  wordsize:  Filter ☒ Align

Sequence 1 lc|seq\_1 Length 8509 (1 .. 8509)

Sequence 2 lc|seq\_2 Length 8509 (1 .. 8509)



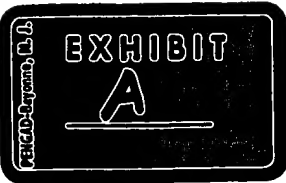
|||||

NOTE: The statistics (bitscore and expect value) is calculated based on the size of nr database

NOTE: If protein translation is reversed, please repeat the search with reverse strand of the query sequence

Score = 1.626e+04 bits (8455), Expect = 0.0  
Identities = 8482/8509 (99%)  
Strand = Plus / Plus

|||||



Query: 1 tggatgaacgcattggccttgatgtttgagaaaaagcgaaagacccggccacagttgtgggt 60  
|||||  
Sbjct: 1 tggatgaacgcattggccttgatgtttgagaaaaagcgaaagacccggccacagttgtgggt 60  
  
Query: 61 agagcgtcgatatgtgcaagacctgatgttgatgacatcgaaactccgtgtctacctcg 120

Sbjct: 61 ||||| agagcgtcgatatgtgcaagacctgatgcttgctgacatcgaaactccgtgtctacctcgc 120

Query: 121 atcgtcgtgtatcagccctgctcgggatggcggaagccccgcctatggtcgtcacgcagc 180  
|||||

Sbjct: 121 atcgtcgtgtatcagccctgctcgggatggcggaagccccgcctatggtcgtcacgcagc 180  
|||||

Query: 181 ccttaaggcgatgcgcgacttgccccatgccgatctggtgcgtttcaccatcgggccggat 240  
|||||

Sbjct: 181 ccttaaggcgatgcgcgacttgccccatgccgatctggtgcgtttcaccatcgggccggat 240  
|||||

Query: 241 tacgcaactggagatgatccttagagcgggttaaccgagacatctggttaacgccataaaagg 300  
|||||

Sbjct: 241 tacgcaactggagatgatccttagagcgggttaaccgagacatctggttaacgccataaaagg 300  
|||||

Query: 301 ctgcggcatgaaaaataggcgggacaaatctgcgcttgccgcgcccttctcagccgtgctt 360  
|||||

Sbjct: 301 ctgcggcatgaaaaataggcgggacaaatctgcgcttgccgcgcccttctcagccgtgctt 360  
|||||

Query: 361 gctctctgcctgcatggcacgacgcaggatcgcggttcatacgggtctgatatccagaccc 420  
|||||

Sbjct: 361 gctctctgcctgcatggcacgacgcaggatcgcggttcatacgggtctgatatccagaccc 420  
|||||

Query: 421 gcccgcccttgagccatgccagcacatcgccatcaagccgcgcggtgatctgctgcttgat 480  
|||||

Sbjct: 421 gcccgcccttgagccatgccagcacatcgccatcaagccgcgcggtgatctgctgcttgat 480  
|||||

Query: 481 cgggcgatagaagcgccccacgctcgcgcttgccccattgggcttcggtcagctcggggaac 540  
|||||

Sbjct: 481 cgggcgatagaagcgccccacgctcgcgcttgccccattgggcttcggtcagctcggggaac 540  
|||||

Query: 541 atcgttggtgtcgatctgctcgggcgagagcggtccagccgccaatttcttgcggcg 600  
|||||

Sbjct: 541 atcgttggtgtcgatctgctcgggcgagagcggtccagccgccaatttcttgcggcg 600  
|||||

Query: 601 ctccctcggttaagagcgggcagcgtatcgaaaggtgtattcaaccattggcatatctcttcc 660  
|||||  
Sbjct: 601 ctccctcggttaagagcgggcagcgtatcgaaaggtgtattcaaccattggcatatctcttcc 660

Query: 661 ttctcctgcggtgtagcgcgggcgagccgaaatgatcgggatcgtctcgaccggatcggggc 720  
|||||  
Sbjct: 661 ttctcctgcggtgtagcgcgggcgagccgaaatgatcgggatcgtctcgaccggatcggggc 720

Query: 721 cagcctcgatgatcaggtgggcaaccagaaagacggcagcgccatagatctgcccaacgg 780  
|||||  
Sbjct: 721 cagcctcgatgatcaggtgggcaaccagaaagacggcagcgccatagatctgcccaacgg 780

Query: 781 ttgcccagcgggtattccccgcctcgatcctatcctgaaccgtcaggtgcaacggatcgg 840  
|||||  
Sbjct: 781 ttgcccagcgggtattccccgcctcgatcctatcctgaaccgtcaggtgcaacggatcgg 840

Query: 841 cgaacacatgcacagcatcctcgaaccggatgccatgcttcttttcgttcttcgcgcct 900  
|||||  
Sbjct: 841 cgaacacatgcacagcatcctcgaaccggatgccatgcttcttttcgttcttcgcgcct 900

Query: 901 tggcgggattcccagataaaaccgcatcttccatggcagaattataactacacattttagtt 960  
|||||  
Sbjct: 901 tggcgggattcccagataaaaccgcatcttccatggcagaattataactacacattttagtt 960

Query: 961 attcaatggcaagtcgcaggttcaaatcacgcccccaaacccgcaactgtattcgttctac 1020  
|||||  
Sbjct: 961 attcaatggcaagtcgcaggttcaaatcacgcccccaaacccgcaactgtattcgttctac 1020

Query: 1021 tcacgcgcgcttttgaatagaagcttgcatgataaacacccgcgctcctcaacaaaata 1080  
|||||  
Sbjct: 1021 tcacgcgcgcttttgaatagaagcttgcatgataaacacccgcgctcctcaacaaaata 1080

Query: 1081 aggcataatccgcgcgctggcgcaaatctgcgctttgtcgatgcaaggtcttgggtttca 1140  
|||||  
Sbjct: 1081 aggcataatccgcgcgctggcgcaaatctgcgctttgtcgatgcaaggtcttgggtttca 1140

```
Query: 1141 tactgaagagcatgcaagggaattgccccggatgagcaccacgacgacacccaccaagcc 1200
      |||||||
Sbjct: 1141 tactgaagagcatgcaagggaattgccccggatgagcaccacgacgacacccaccaagcc 1200

Query: 1201 ggccctggaacaaggccgcgttctcggggaaaaagccgcctgacacactgaccagattgc 1260
      |||||||
Sbjct: 1201 ggccctggaacaaggccgcgttctcggggaaaaagccgcctgacacactgaccagattgc 1260

Query: 1261 cctgatccgctctcatcctcgccagggaacggcgctggcgggatctggctctgttcaacgt 1320
      |||||||
Sbjct: 1261 cctgatccgctctcatcctcgccagggaacggcgctggcgggatctggctctgttcaacgt 1320

Query: 1321 ggcgatcgacaccagtttgcgcggctcggaacctcgtgcgcctgcgcgtctcggatgtggc 1380
      |||||||
Sbjct: 1321 ggcgatcgacaccagtttgcgcggctcggaacctcgtgcgcctgcgcgtctcggatgtggc 1380

Query: 1381 gacccagctggtctgcgtgagatcgatcgagatccgccagaagaagaccgagggcccgcaa 1440
      |||||||
Sbjct: 1381 gacccagctggtctgcgtgagatcgatcgagatccgccagaagaagaccgagggcccgcaa 1440

Query: 1441 tgtcgcgccccgtacaggccccgcctgtcggaggggacacgcgagagcctgcgggtctatct 1500
      |||||||
Sbjct: 1441 tgtcgcgccccgtacaggccccgcctgtcggaggggacacgcgagagcctgcgggtctatct 1500

Query: 1501 cgcggcctctgacaaagccgctgcacagctggctgttcacggacaggggcatccgctggtc 1560
      |||||||
Sbjct: 1501 cgcggcctctgacaaagccgctgcacagctggctgttcacggacaggggcatccgctggtc 1560

Query: 1561 ccacacccaccttagcgagagccagctgtggcgccctgttcaagtccctggctcgagaaggc 1620
      |||||||
Sbjct: 1561 ccacacccaccttagcgagagccagctgtggcgccctgttcaagtccctggctcgagaaggc 1620

Query: 1621 gcggctcgatcccagcctctacgggctgcactcgctgcgcgaaccttccccagccacat 1680
      |||||||
Sbjct: 1621 gcggctcgatcccagcctctacgggctgcactcgctgcgcgaaccttccccagccacat 1680
```

Query: 1681 ctaccgcgagaccgggcaatctgcgcgcgcacagctgctgctgggccatgccagcatcga 1740  
|||||  
Sbjct: 1681 ctaccgcgagaccgggcaatctgcgcgcgcacagctgctgctgggccatgccagcatcga 1740

Query: 1741 gagcaccaggaggtacatcggcaccgagcaagccgaggccctcgatatcgcacggaggtta 1800  
|||||  
Sbjct: 1741 gagcaccaggaggtacatcggcaccgagcaagccgaggccctcgatatcgcacggaggtta 1800

Query: 1801 tcaccttaacccatggagacctatctcgagaagcgcaccccccccaagaacacacagcacg 1860  
|||||  
Sbjct: 1801 tcaccttaacccatggagacctatctcgagaagcgcaccccccccaagaacacacagcacg 1860

Query: 1861 gttctaccgcatggcggtcctgcggaacctgttcggggaatggacgctgtatcgagaatg 1920  
|||||  
Sbjct: 1861 gttctaccgcatggcggtcctgcggaacctgttcggggaatggacgctgtatcgagaatg 1920

Query: 1921 gggccgcattggcatcagcgccgcacatcgggctcgattggtttgagagtgaacaaagatgc 1980  
|||||  
Sbjct: 1921 gggccgcattggcatcagcgccgcacatcgggctcgattggtttgagagtgaacaaagatgc 1980

Query: 1981 catcgctgcgatgctgccatcgagaccgccaagcgtcagcgcggtattggctcgagcc 2040  
|||||  
Sbjct: 1981 catcgctgcgatgctgccatcgagaccgccaagcgtcagcgcggtattggctcgagcc 2040

Query: 2041 catccagattgacatgttcccaggggcataacaggcccatcaatgtaagagtgaagcgga 2100  
|||||  
Sbjct: 2041 catccagattgacatgttcccaggggcataacaggcccatcaatgtaagagtgaagcgga 2100

Query: 2101 gcaagcaaaagccatttcacagtgagtgagcagatgttcctgtttcacagtgaaaagcgct 2160  
|||||  
Sbjct: 2101 gcaagcaaaagccatttcacagtgagtgagcagatgttcctgtttcacagtgaaaagcgct 2160

Query: 2161 gatgctgtttccacgccacagactgatacaccaaaagcaacgggtctgcgccacagac 2220  
|||||

Sbjct: 2161 gatgctgtttccaacgcccacagactatacagaccaaaagcaacgggtctgcccgcacagac 2220

Query: 2221 cggttcgcggccaccgccagaaacgcagggtaaaaatggcgatttccgcnnnnnnnnccgtg 2280  
|||||  
Sbjct: 2221 cggttcgcggccaccgccagaaacgcagggtaaaaatggcgatttccgcaaaaaaacccgtg 2280  
|||||

Query: 2281 caaatgatggcaaaatcaccatccagtttcatcctgaaacccgctcgctcaacatgaacgag 2340  
|||||  
Sbjct: 2281 caaatgatggcaaaatcaccatccagtttcatcctgaaacccgctcgctcaacatgaacgag 2340  
|||||

Query: 2341 caggccatcatccaagccccagaaaaacgggtgcggcgactacagatgagcgatgttctgg 2400  
|||||  
Sbjct: 2341 caggccatcatccaagccccagaaaaacgggtgcggcgactacagatgagcgatgttctgg 2400  
|||||

Query: 2401 ctcataggtgcaaggccctgcaacagtgatttcaccgtgagattgcagggtcttttggc 2460  
|||||  
Sbjct: 2401 ctcataggtgcaaggccctgcaacagtgatttcaccgtgagattgcagggtcttttggc 2460  
|||||

Query: 2461 tctcccgcaagagccacctcagggtgagcgagctagccgctctaggttcacagtgaaaaatcg 2520  
|||||  
Sbjct: 2461 tctcccgcaagagccacctcagggtgagcgagctagccgctctaggttcacagtgaaaaatcg 2520  
|||||

Query: 2521 ctgaggagcgttgcgggggttatggtttggctgggtcacgcttgccatcggaatggagcat 2580  
|||||  
Sbjct: 2521 ctgaggagcgttgcgggggttatggtttggctgggtcacgcttgccatcggaatggagcat 2580  
|||||

Query: 2581 acgatggcttctacgcagtcgaatcctgagggttcacgtgggaaaaatacgtccaaaaa 2640  
|||||  
Sbjct: 2581 acgatggcttctacgcagtcgaatcctgagggttcacgtgggaaaaatacgtccaaaaa 2640  
|||||

Query: 2641 agccctgacccaaatcttggaataattgctgaaaaagtgtgcttctaaaaaaactgggaacg 2700  
|||||  
Sbjct: 2641 agccctgacccaaatcttggaataattgctgaaaaagtgtgcttctaaaaaaactgggaacg 2700  
|||||

Query: 2701 agatatgcacgagatcccttacgagtgctgttaggagtaatgcagtggaacaaaaacgccat 2760

# Blast Result

```

|||||
Sbjct: 2701 agatatgcacgagatcccttacgagtgtgtaggagtaatgcagtggacaaaaacgccat 2760

Query: 2761 tttttgccccagtaggagtaaatggagtggttatttttgggagattttgtcttcagtagga 2820
|||||
Sbjct: 2761 tttttgccccagtaggagtaaatggagtggttatttttgggagattttgtcttcagtagga 2820

Query: 2821 gtaacgcgttggttaaaatttgcttgattggcggttcaaaatcgaccaccgagctgccgttg 2880
|||||
Sbjct: 2821 gtaacgcgttggttaaaatttgcttgattggcggttcaaaatcgaccaccgagctgccgttg 2880

Query: 2881 gtcgtattcgatctgccccgcaattgggcacttgcaggccatccccctgaacttctggcg 2940
|||||
Sbjct: 2881 gtcgtattcgatctgccccgcaattgggcacttgcaggccatccccctgaacttctggcg 2940

Query: 2941 atgaccatttcgaaggcaatgggtcgaaattcattagaattttgtgtgaggtgcgtagcgg 3000
|||||
Sbjct: 2941 atgaccatttcgaaggcaatgggtcgaaattcattagaattttgtgtgaggtgcgtagcgg 3000

Query: 3001 ctctgacaggggtgctgcgcggagatctctggtctcaggtagggcgacaaatggagaggtg 3060
|||||
Sbjct: 3001 ctctgacaggggtgctgcgcggagatctctggtctcaggtagggcgacaaatggagaggtg 3060

Query: 3061 ttagttgccccctgtatcgctctctcgctggcgcaattgggtcatctctgccccggacatatg 3120
|||||
Sbjct: 3061 ttagttgccccctgtatcgctctctcgctggcgcaattgggtcatctctgccccggacatatg 3120

Query: 3121 atattccgctagaggattactgatagtttctgcctgtcgggcttgtcgggcttgtcgggc 3180
|||||
Sbjct: 3121 atattccgctagaggattactgatagtttctgcctgtcgggcttgtcgggcttgtcgggc 3180

Query: 3181 ttgtcgggcttgtcgggcctgtccctcttctgcccgcctgtcctcactttttcacaatcaa 3240
|||||
Sbjct: 3181 ttgtcgggcttgtcgggcctgtccctcttctgcccgcctgtcctcactttttcacaatcaa 3240

```

Query: 3241 aaatggcggaagcccttctgttctctatagttcttatagttccatacgaaaaattacacata 3300  
|||||  
Sbjct: 3241 aaatggcggaagcccttctgttctctatagttcttatagttccatacgaaaaattacacata 3300

Query: 3301 attatcaatagcttattcgcttaaaaggaggagtaattggccgcgcaaaaggaggagtaattggg 3360  
|||||  
Sbjct: 3301 attatcaatagcttattcgcttaaaaggaggagtaattggccgcgcaaaaggaggagtaattggg 3360

Query: 3361 ccgcaaaaggaggagtaattggccgcgcaaaaggaggagtaattggccgcgatatcggtgttttac 3420  
|||||  
Sbjct: 3361 ccgcaaaaggaggagtaattggccgcgcaaaaggaggagtaattggccgcgatatcggtgttttac 3420

Query: 3421 atggggagggaatcccccttaatactttctccccatgggaaagacacacaagaatggccgcgag 3480  
|||||  
Sbjct: 3421 atggggagggaatcccccttaatactttctccccatgggaaagacacacaagaatggccgcgag 3480

Query: 3481 accgggaccttcgaccagacaaaaaactgtgtctccctgccgaggtggcgagaggggtctata 3540  
|||||  
Sbjct: 3481 accgggaccttcgaccagacaaaaaactgtgtctccctgccgaggtggcgagaggggtctata 3540

Query: 3541 tgcgcaatccgccccgcctgcaggcgctcaagctcatgcattttaatgatagccactgcgg 3600  
|||||  
Sbjct: 3541 tgcgcaatccgccccgcctgcaggcgctcaagctcatgcattttaatgatagccactgcgg 3600

Query: 3601 gcggccgcgatggctgatgatgtgcgccatgaaatgcggctggccgcgacattcgcgcaatcg 3660  
|||||  
Sbjct: 3601 gcggccgcgatggctgatgatgtgcgccatgaaatgcggctggccgcgacattcgcgcaatcg 3660

Query: 3661 acggcatgaaaaaacccatgaccgtgagagcctgacccccgctgttcgagagtagcccgctg 3720  
|||||  
Sbjct: 3661 acggcatgaaaaaacccatgaccgtgagagcctgacccccgctgttcgagagtagcccgctg 3720

Query: 3721 cgggtgtgaccccatgatgacctcgcaaaagatgatcgtgacagtcggcggccttggtcgcgatg 3780  
|||||  
Sbjct: 3721 cgggtgtgaccccatgatgacctcgcaaaagatgatcgtgacagtcggcggccttggtcgcgatg 3780



Query: 3781 aggcgcgaatagactaccgccaggagcgcaagcgcggaactcctagtgacgtggaccttc 3840  
|||||  
Sbjct: 3781 aggcgcgaatagactaccgccaggagcgcaagcgcggaactcctagtgacgtggaccttc 3840

Query: 3841 ggagtacattccgctcgatggcgggcgagtcgaaccactggccattctcgcaccgtcaaa 3900  
|||||  
Sbjct: 3841 ggagtacattccgctcgatggcgggcgagtcgaaccactggccattctcgcaccgtcaaa 3900

Query: 3901 cggattccatctcggtagtaagtattccgtgctgctgttccagcaagtcctctagtctcg 3960  
|||||  
Sbjct: 3901 cggattccatctcggtagtaagtattccgtgctgctgttccagcaagtcctctagtctcg 3960

Query: 3961 ccaatcttgatcggatgagcgcgaaaaacctttacggtccccgagttgcgggcgctccttg 4020  
|||||  
Sbjct: 3961 ccaatcttgatcggatgagcgcgaaaaacctttacggtccccgagttgcgggcgctccttg 4020

Query: 4021 gagtgcgcgaggggaaaagatggttcgttggaacgacgttaacagatttgctctcaaacctg 4080  
|||||  
Sbjct: 4021 gagtgcgcgaggggaaaagatggttcgttggaacgacgttaacagatttgctctcaaacctg 4080

Query: 4081 cactggatgagatcaaccatttatcgcgtctgacattgacggcaaaagccgaccaagattg 4140  
|||||  
Sbjct: 4081 cactggatgagatcaaccatttatcgcgtctgacattgacggcaaaagccgaccaagattg 4140

Query: 4141 gccgtagcgtggcaagtgtgactataggctgggaagtgaagacgaccccaaccgctcgcca 4200  
|||||  
Sbjct: 4141 gccgtagcgtggcaagtgtgactataggctgggaagtgaagacgaccccaaccgctcgcca 4200

Query: 4201 ggcgcgagctggcggggttccaaaggtcgtcgagatgctcgtcgagaggggcagcgggaaa 4260  
|||||  
Sbjct: 4201 ggcgcgagctggcggggttccaaaggtcgtcgagatgctcgtcgagaggggcagcgggaaa 4260

Query: 4261 cgatagccccctccttcccagaagcgggggatcacctacagtcacagttggctggagc 4320  
|||||  
Sbjct: 4261 cgatagccccctccttcccagaagcgggggatcacctacagtcacagttggctggagc 4320

Query: 4321 tgaaacgctctgtctggcagcaacaagaagacacgatctgatcgccctcagacttccggcggtt 4380  
|||||  
Sbjct: 4321 tgaaacgctctgtctggcagcaacaagaagacacgatctgatcgccctcagacttccggcggtt 4380

Query: 4381 tctgtcgggagagagcgctgcgtctggaacgctgcaaacatcgaaaaactgttttttagatt 4440  
|||||  
Sbjct: 4381 tctgtcgggagagagcgctgcgtctggaacgctgcaaacatcgaaaaactgttttttagatt 4440

Query: 4441 tctgcgcaaaaggtagggaaggtttgagttttgaggtatttcaccgcaatagtggttaaattg 4500  
|||||  
Sbjct: 4441 tctgcgcaaaaggtagggaaggtttgagttttgaggtatttcaccgcaatagtggttaaattg 4500

Query: 4501 actttcgtgaaacgatgtgcaatatagcggtaagactatgaaatacacggtggacaggc 4560  
|||||  
Sbjct: 4501 actttcgtgaaacgatgtgcaatatagcggtaagactatgaaatacacggtggacaggc 4560

Query: 4561 tgcaaaaagcaacgggtgtggcgaccgcaaccatcactcggcgctaaaaagcggtaaaaat 4620  
|||||  
Sbjct: 4561 tgcaaaaagcaacgggtgtggcgaccgcaaccatcactcggcgctaaaaagcggtaaaaat 4620

Query: 4621 ttccggtaaaaaagatgaatctgtgggcatgggttatagatcctgcagaattgcacagagt 4680  
|||||  
Sbjct: 4621 ttccggtaaaaaagatgaatctgtgggcatgggttatagatcctgcagaattgcacagagt 4680

Query: 4681 gtttcctcccatattcaaaagaaatacacgcgaaacacctaacaacgcaagtatatggtaagcg 4740  
|||||  
Sbjct: 4681 gtttcctcccatattcaaaagaaatacacgcgaaacacctaacaacgcaagtatatggtaagcg 4740

Query: 4741 tgatgaaacacatgaaatgacctcagaaatcagcgcattagagcgtgaagttcggacttt 4800  
|||||  
Sbjct: 4741 tgatgaaacacatgaaatgacctcagaaatcagcgcattagagcgtgaagttcggacttt 4800

Query: 4801 acgcgatgctttatctgatgccaggaggatcgcgacaaaatggcgcgacatggccgagcg 4860  
|||||

Sbjct: 4801 acgcgatgctttatctgatgccaggaggatcgcgacaaatggcgcgacatggccgagcg 4860

Query: 4861 tctttcaatttccatcacccgatgagagaggaagaccgccccccctcaaaaaaagaatggtg 4920  
|||||

Sbjct: 4861 tctttcaatttccatcacccgatgagagaggaagaccgccccccctcaaaaaaagaatggtg 4920  
|||||

Query: 4921 gaagatatctgatccctgggcttcaggagccttgcctttaaaaacctgaatcagcattcta 4980  
|||||

Sbjct: 4921 gaagatatctgatccctgggcttcaggagccttgcctttaaaaacctgaatcagcattcta 4980  
|||||

Query: 4981 gcgatgctgataagaagtaataatagccacaatagagcggccattttccattcacatata 5040  
|||||

Sbjct: 4981 gcgatgctgataagaagtaataatagccacaatagagcggccattttccattcacatata 5040  
|||||

Query: 5041 gctcatcatgtgatcaatatcaagtattgatattcatcaatggagagaattttacatgta 5100  
|||||

Sbjct: 5041 gctcatcatgtgatcaatatcaagtattgatattcatcaatggagagaattttacatgta 5100  
|||||

Query: 5101 tcacaggatcatcacagcatttgttttcttaagtgtctaataactatcgctgg 5160  
|||||

Sbjct: 5101 tcacaggatcatcacagcatttgttttcttaagtgtctaataactatcgctgg 5160  
|||||

Query: 5161 ccctaaagaagattgtactattgcagtatctcaccttgggtttcagaccgataaattacag 5220  
|||||

Sbjct: 5161 ccctaaagaagattgtactattgcagtatctcaccttgggtttcagaccgataaattacag 5220  
|||||

Query: 5221 ctttgtcgaagccggnnnnnnnnnccagagagagacacgtttttgatggtgtaataaaactg 5280  
|||||

Sbjct: 5221 ctttgtcgaagccggttttttggcagagagagacacgtttttgatggtgtaataaaactg 5280  
|||||

Query: 5281 ctacgtatctcatgatggtaacatacacagcatcatccggggcaacacacctcttatgga 5340  
|||||

Sbjct: 5281 ctacgtatctcatgatggtaacatacacagcatcatccggggcaacacacctcttatgga 5340  
|||||

Query: 5341 agatggatattatggcccagaagtactggcggaacacgcgatattgaggcacaggcccg 5400

```
|||||
Sbjct: 5341 agatggatatattggccagaagtactggcggaacgcgatatattgaggcacaggcccg 5400

Query: 5401 cacttttagaggcggaagcctataacgagtagcaccataacactagaagccagattgaggaaaa 5460
|||||
Sbjct: 5401 cacttttagaggcggaagcctataacgagtagcaccataacactagaagccagattgaggaaaa 5460

Query: 5461 tagggaacgtgccctcgcagggcgctgcggctagctagcagtccttttattataataatggtag 5520
|||||
Sbjct: 5461 tagggaacgtgccctcgcagggcgctgcggctagctagcagtccttttattataataatggtag 5520

Query: 5521 tacagaagaacagacacaattatacaggcgcgcaactccgacggcagatcctgtgtatctgt 5580
|||||
Sbjct: 5521 tacagaagaacagacacaattatacaggcgcgcaactccgacggcagatcctgtgtatctgt 5580

Query: 5581 acccgtggcatctccagaatctaaacaaagtgcgagacggcggaacccgctgctgttccagc 5640
|||||
Sbjct: 5581 acccgtggcatctccagaatctaaacaaagtgcgagacggcggaacccgctgctgttccagc 5640

Query: 5641 atcagtttctgttagagagatgtggagcacggctgacagattgaccaccggtacatgccc 5700
|||||
Sbjct: 5641 atcagtttctgttagagagatgtggagcacggctgacagattgaccaccggtacatgccc 5700

Query: 5701 atcgactcgatgcggagcaactagctgggtaaacagatggaactaaagtaaacagtttatga 5760
|||||
Sbjct: 5701 atcgactcgatgcggagcaactagctgggtaaacagatggaactaaagtaaacagtttatga 5760

Query: 5761 agaaaaaacgggttggtctagaaatcggagagctacagtcctgcaatgtgcataaaatggaat 5820
|||||
Sbjct: 5761 agaaaaaacgggttggtctagaaatcggagagctacagtcctgcaatgtgcataaaatggaat 5820

Query: 5821 aagtgccgcggtcgatttcagggtgaattctcctgcaatcccaccaatgggtatcggttaatgg 5880
|||||
Sbjct: 5821 aagtgccgcggtcgatttcagggtgaattctcctgcaatcccaccaatgggtatcggttaatgg 5880
```

Query: 5881 gcaattcgcaaccctgggttttctcggattatcttacgatccaagagccagaagctcccat 5940  
|||||  
Sbjct: 5881 gcaattcgcaaccctgggttttctcggattatcttacgatccaagagccagaagctcccat 5940

Query: 5941 atccaccaagaagtgtcgaaatatgggctcgagaactcagataattaccgtatctattc 6000  
|||||  
Sbjct: 5941 atccaccaagaagtgtcgaaatatgggctcgagaactcagataattaccgtatctattc 6000

Query: 6001 tagtcagttctgcactgccgctctcgaatatgatcaacgatagatgcaatacatctga 6060  
|||||  
Sbjct: 6001 tagtcagttctgcactgccgctctcgaatatgatcaacgatagatgcaatacatctga 6060

Query: 6061 ttccagagatttagcttggttatcttctcctgaaagagacaggattactacttcaccta 6120  
|||||  
Sbjct: 6061 ttccagagatttagcttggttatcttctcctgaaagagacaggattactacttcaccta 6120

Query: 6121 ttgtggcgatttcaacctcaaaacagatgggtatttgaatgtcaggacaggtgaaatcac 6180  
|||||  
Sbjct: 6121 ttgtggcgatttcaacctcaaaacagatgggtatttgaatgtcaggacaggtgaaatcac 6180

Query: 6181 ccgctgatattccaccacaaagtgagtcctgtagatcagactctcaaggagtaaacgtttta 6240  
|||||  
Sbjct: 6181 ccgctgatattccaccacaaagtgagtcctgtagatcagactctcaaggagtaaacgtttta 6240

Query: 6241 atccatctccatgagatcaacatagataggtgttcagtcgccgcatctggtggatcgggt 6300  
|||||  
Sbjct: 6241 atccatctccatgagatcaacatagataggtgttcagtcgccgcatctggtggatcgggt 6300

Query: 6301 ttaggatgaatctgtccggctcttgacatacccccgctgaaacccctgtctttacaagag 6360  
|||||  
Sbjct: 6301 ttaggatgaatctgtccggctcttgacatacccccgctgaaacccctgtctttacaagag 6360

Query: 6361 aaagtcagcggcctcgaaagccgctctagccgatgccccggcccaacgggatgagtagagc 6420  
|||||  
Sbjct: 6361 aaagtcagcggcctcgaaagccgctctagccgatgccccggcccaacgggatgagtagagc 6420

<http://www.ncbi.nlm.nih.gov/blast/b12seq/wblast2.cgi?0>

Query: 6961 gcgcgaacagcaaacgcggcggtcggtcggaacgctatatctagacctgcttcgg 7020  
|||||  
Sbjct: 6961 gcgcgaacagcaaacgcggcggtcggtcggaacgctatatctagacctgcttcgg 7020  
|||||

Query: 7021 gacccggatccgaagaactccgatgaagacgaaggcaatgagttcgggaatcacttacggt 7080  
|||||  
Sbjct: 7021 gacccggatccgaagaactccgatgaagacgaaggcaatgagttcgggaatcacttacggt 7080  
|||||

Query: 7081 ctctctttccatgaacgccgcccagccagcagccacagccaccactggttcaagggtgga 7140  
|||||  
Sbjct: 7081 ctctctttccatgaacgccgcccagccagcagccacagccaccactggttcaagggtgga 7140  
|||||

Query: 7141 tcgatactggattatcctacagacgagctggagggttgattgccaaaggtgaagacc 7200  
|||||  
Sbjct: 7141 tcgatactggattatcctacagacgagctggagggttgattgccaaaggtgaagacc 7200  
|||||

Query: 7201 gaatttcatcatggtgtatcggttggaaggggctggcggaagacacccctgcgccgg 7260  
|||||  
Sbjct: 7201 gaatttcatcatggtgtatcggttggaaggggctggcggaagacacccctgcgccgg 7260  
|||||

Query: 7261 ttgcaccgcgtcatctggaaagacgagggcatcaacttttctactgaacgcgaccagtcg 7320  
|||||  
Sbjct: 7261 ttgcaccgcgtcatctggaaagacgagggcatcaacttttctactgaacgcgaccagtcg 7320  
|||||

Query: 7321 gttgatcgggtgctggacatcttcgtcggggccaatgacgggggcacgaaactgtcgaag 7380  
|||||  
Sbjct: 7321 gttgatcgggtgctggacatcttcgtcggggccaatgacgggggcacgaaactgtcgaag 7380  
|||||

Query: 7381 gcagacctgtgatgtcgatgatcagtcacaaatggtccagcggatcgcccgcgaggaa 7440  
|||||  
Sbjct: 7381 gcagacctgtgatgtcgatgatcagtcacaaatggtccagcggatcgcccgcgaggaa 7440  
|||||

Query: 7441 atcggcggctttgtcgagcacataaacaagggtctcggtcgcccgaaacaagatcagtcgc 7500  
|||||

Query: 7981 caatatggcaagccccggacccttcgttgcgcctatcgcctctatcagggcatcgcactgg 8040



```
|||||
Sbjct: 7981 caatatggcaagcccggaaccttcgttcgctgctgctctatcagggcacgactgg 8040

Query: 8041 aacggatcgacctggcatgtcgatcatatcatattccccaaagcggacgctcagaaaaaatgtg 8100
|||||
Sbjct: 8041 aacggatcgacctggcatgtcgatcatatcatattccccaaagcggacgctcagaaaaaatgtg 8100

Query: 8101 ctgcgcggcgcaaatctgccccgagcatcgcatctcaggaaaatcttggcgcggttaacagt 8160
|||||
Sbjct: 8101 ctgcgcggcgcaaatctgccccgagcatcgcatctcaggaaaatcttggcgcggttaacagt 8160

Query: 8161 ttgggcaacctgcaacttttgcgcggagatgagaatatcgagaaaagtgcgctgccattc 8220
|||||
Sbjct: 8161 ttgggcaacctgcaacttttgcgcggagatgagaatatcgagaaaagtgcgctgccattc 8220

Query: 8221 aggtcatggattaccggacggcgcggttgatttctacgagcagcatatgatccccggcgcac 8280
|||||
Sbjct: 8221 aggtcatggattaccggacggcgcggttgatttctacgagcagcatatgatccccggcgcac 8280

Query: 8281 cttgaactgtcgatgtactgcattctgccgagttcgtgcgcgaacgggaaaaagggtgatc 8340
|||||
Sbjct: 8281 cttgaactgtcgatgtactgcattctgccgagttcgtgcgcgaacgggaaaaagggtgatc 8340

Query: 8341 cggcgccgtttgatggagttggtcggagcacgacgcgcgatgaatgaggtcgtcttgtcac 8400
|||||
Sbjct: 8341 cggcgccgtttgatggagttggtcggagcacgacgcgcgatgaatgaggtcgtcttgtcac 8400

Query: 8401 gcgaagagctgcgtcaaatcttgtctcgacctgttgaaaaaacgcgctgtcgaacacccctg 8460
|||||
Sbjct: 8401 gcgaagagctgcgtcaaatcttgtctcgacctgttgaaaaaacgcgctgtcgaacacccctg 8460

Query: 8461 cgggacaccaagggaagctcgccccgcgtatgttgtcacccgcgacga 8509
|||||
Sbjct: 8461 cgggacaccaagggaagctcgccccgcgtatgttgtcacccgcgacga 8509
```

CPU time: 0.07 user secs. 0.02 sys. secs 0.09 total secs.

Lambda K H  
1.33 0.621 1.12

Gapped  
Lambda K H  
1.33 0.621 1.12

Matrix: blastn matrix:1 -2  
Gap Penalties: Existence: 5, Extension: 2  
Number of Sequences: 1  
Number of Hits to DB: 3000  
Number of extensions: 67  
Number of successful extensions: 16  
Number of sequences better than 10.0: 1  
Number of HSP's better than 10.0 without gapping: 1  
Number of HSP's gapped: 1  
Number of HSP's successfully gapped: 1  
Number of extra gapped extensions for HSPs above 10.0: 0  
Length of query: 8509  
Length of database: 12,527,565,053  
Length adjustment: 28  
Effective length of query: 8481  
Effective length of database: 12,527,565,025  
Effective search space: 106246278977025  
Effective search space used: 106246278977025  
Neighboring words threshold: 0  
Window for multiple hits: 0  
X1: 11 (21.1 bits)  
X2: 26 (50.0 bits)  
X3: 26 (50.0 bits)  
S1: 12 (23.8 bits)  
S2: 23 (44.9 bits)